PA/SI Equivalent

SITE INSPECTION WORK PLAN & EA

FOR:

Old American Zinc

PREPARED BY

SITE ASSESSMENT UNIT
DIVISION OF LAND POLLUTION CONTROL
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62794

Alan Altur
11/28/94
Sampling
71.00

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EA Start -
7352 -
SI Start
w/QAPP

CONTENTS

I. SITE INFORMATION

I. GENERAL

Site Name: Old American Zinc

ILD# 000034355

Site Location: Fairmont City, IL

LPC#

SE 1/4 of Sec 4
T 2 N, R 9 W.

Work plan prepared by:

Peter Sorensen

Estimated inspection date:

November 29 and 30, 1994

Work plan approved by:

Alan Altenn 11/28/94

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II. THE ASSIGNMENT (briefly describe the objectives of the inspection and how they are going to be accomplished).

The purpose of an Integrated Assessment (IA) is to document site contamination and identify the potential migration pathways where contaminants may be transported. Soil/sediment samples will be collected during the IA to be used to evaluate the impact of contamination.

III. SITE DESCRIPTION (briefly describe the site, including location, que geological features, source(s) of contamination, methods of disposaland current status of activities).

Old American Zinc occupies approximately 132 acres and is located along Kingshighway just north of E. St. Louis in Fairmont City, Illinois, in St. Clair County. The property is bordered by residential areas to the north and west, Kingshighway and an industrial area to the east and east/west running railroad tracks and a residential area to the south. The site is now vacant with the only standing building being the offices of the current owners of the property (XTRA Intermodal) on a small portion of the east side of the property. There are numerous semi trailers stored on site which are owned by XTRA Intermodal.

The property is generally topographically level and is entirely covered with slag materials from the smelting furnaces which have been spread throughout the site and leveled. On some areas of the property there are large piles of slag still remaining.

IV. **SITE HISTORY** (briefly describe the history of the site including previous owners, reported injuries, complaints, govt. action).

Due to the fact that Old American Zinc stopped operations in Fairmont City in 1967 there has been limited information available on the operations of the facility. The following tells what information has been obtained so far. A further search for historical information on the site is being conducted at this time.

Old American Zinc operated as a primary zinc smelter from the early 1900's until 1967. At time of closing the facility was moved to Sauget, Illinois and all structures on the property were either moved or torn down and disposed of off site. During its years of operation it produced zinc, ? d, cadmium and sulfuric acid. In addition to this, it also produced its own producer gas to aid in the smelting process.

Following the closing of the facility in 1967, the property lay vacant until 1979 when XTRA Intermodal purchased the property. XTRA Intermodal uses the property as an area to store semi trailers that they lease to railroads. There is no reason to beleive that XTRA has contributed to the contamination of the property.

II. SAFETY CONSIDERATIONS

I. **PHYSICAL HAZARDS AT SITE** (briefly describe any physical hazards that the inspection team may encounter at the site).

Due to the timing of the sampling event, there is a possibility that the weather at the time of sampling may be cold.

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II. **CHEMICAL HAZARDS AT SITE** (briefly identify those chemicals that are known or are suspected to be present, include their state and physical characteristics).

Due to the fact that the site was a zinc smelter, it is likely that elevated levels of lead, cadmium, copper, arsenic and zinc are present on site. Because producer gas was produced on site there are possibly coal tars also present on site. Measures will be taken according to the site safety plan to protect the team from these hazards.

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III. **DERMAL AND RESPIRATORY PROTECTION** (identify the level of personal protection that will be used, including anticipated modifications).

Level D protection will be used at all times, with continuous air monitoring during the sample collection. If an increase occurs, the following will be implemented:

0-5 units over background Level C

5-50 units over background Level B

50-500 units over background Level A

IV. EMERGENCY INFORMATION

Nearest Hospital: St. Mary's

Hospital Location: 8th ST. in East St. Louis

Ambulance Service: 911

Fire Service: 911

Police: 911

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III. FIELD ACTIVITIES

I. TEAM ASSIGNMENTS

NAME	Responsibility
Peter Sorensen	Project Manager
Bob Casper	Safety Officer/Sampler
Bruce Everetts	Sampler
Mark Weber	Sampler

II. FIELD WORK PROPOSED
(check all that apply)

	Activity	Procedures
X	Ambient Air Sampling (OVA,HNU,etc.)	IEPA Methods Manual pp.19-23
	Groundwater Sampling	IEPA Methods Manual pp.1-5
	Surface Water Sampling	IEPA Methods Manual pp.6-10
X	Soil/Sediment Sampling	IEPA Methods Manual pp.13-18
	Tap Water Sampling	IEPA Methods Manual pp.11-12
	Slope Determinations	IEPA Methods Manual pp.24-25
	Water Level Measurements	IEPA Methods Manual p.31
X	Perimeter Survey	IEPA Methods Manual p.33
X	Site Inspection	IEPA Methods Manual pp.34-39
	Soil Borings/Well Installation	IEPA Methods Manual pp.26-30
X	Public Interviews	IEPA Methods Manual p.40
	Groundwater Flow Determination	IEPA Methods Manual p.32
X	Decontamination Procedures	IEPA Methods Manual pp.41-56
	Others:	

IV. SAMPLING

I. **PROCEDURES** (briefly describe the procedures the inspection team will employ in their collection of environmental samples).

All samples will be collected in accordance with the Illinois Environmental Protection Agency's Site Inspection QAPP. Soil/ sediment samples will be collected with stainless steel spoons.

II. **LOCATION OF SAMPLES** (identify the number of samples, their type and their location. The attached map should identify these locations).

C.1 Site Soil Samples

Sample	Type	Justification
X101	soil	Background soil sample.
X102 - X117	soil	Residential soil samples taken to determine if contaminants are present on their property (X104, X112 and X117 will be collected from the property of nearby schools).

On Site Samples

Sample	Type	Justification
X501	waste	Sample will be taken from a large waste pile of slag material. The sample will characterize the waste in the pile.
X502	waste	Sample will be taken from the location where the sulfuric acid plant and storage tanks were located. The sample will help to characterize the contaminants on site.
X503	waste	Sample will be taken from the location where the cadmium shop was located. The sample should help to further characterize the contaminants on site.
X504	waste	Sample will be taken from the location where the Producer Gas production buildings were located. The sample should help to further characterize the contaminants on site.
X505	waste	Sample will be taken from the location where the arsenic leaching building was located. The sample should help to further characterize the contaminants on site.

Sediment Samples

Sample	Type	Justification
X201	sediment	Background sediment sample.
X202 - X204	sediment	Samples will be taken to determine if contaminants located on site have migrated from the site via the surface water pathway.
X205 - X207	sediment	Samples will be taken in an area of wetlands to determine if contaminants from the site have impacted the wetlands. X206 and X207 will be taken in the same location as duplicate samples.
X208	sediment	Sample will be taken in the perenially flowing Schoenberger Creek which is a local fishery. The sample will help determine whether contaminants from the site have impacted the fishery.

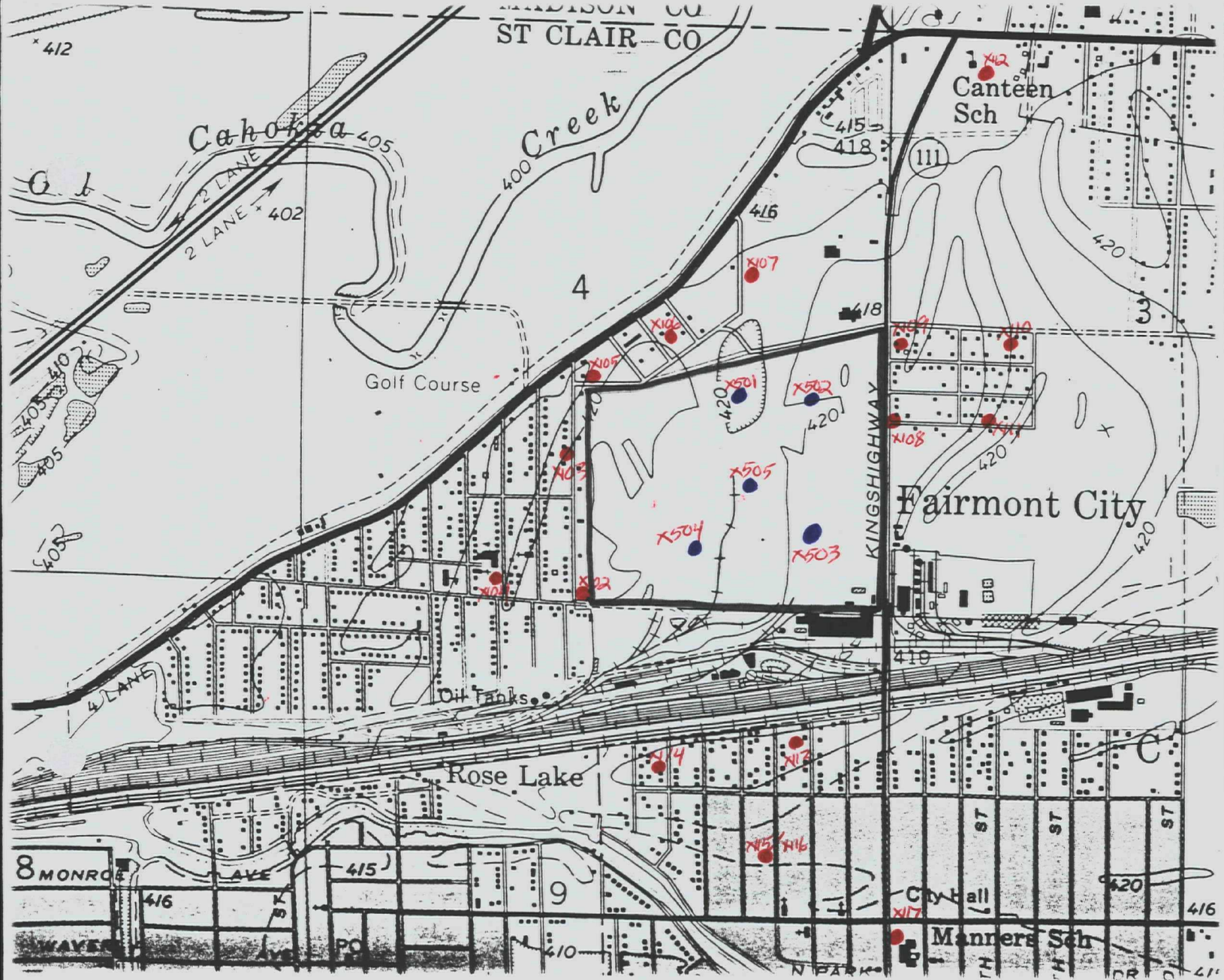
III. ANALYTICAL SERVICES (identify the laboratory that will perform the analysis of the samples taken at the site, include requested analysis)

The samples will be analyzed for the Target Compound List. The samples will be analyzed by the Contract Lab Program. It will not be known until just prior to the sampling event which laboratories the samples will be analyzed at.

ATTACHMENT I

RECORDS AND DOCUMENTATION (Check the records or documents that will be generated during this project)

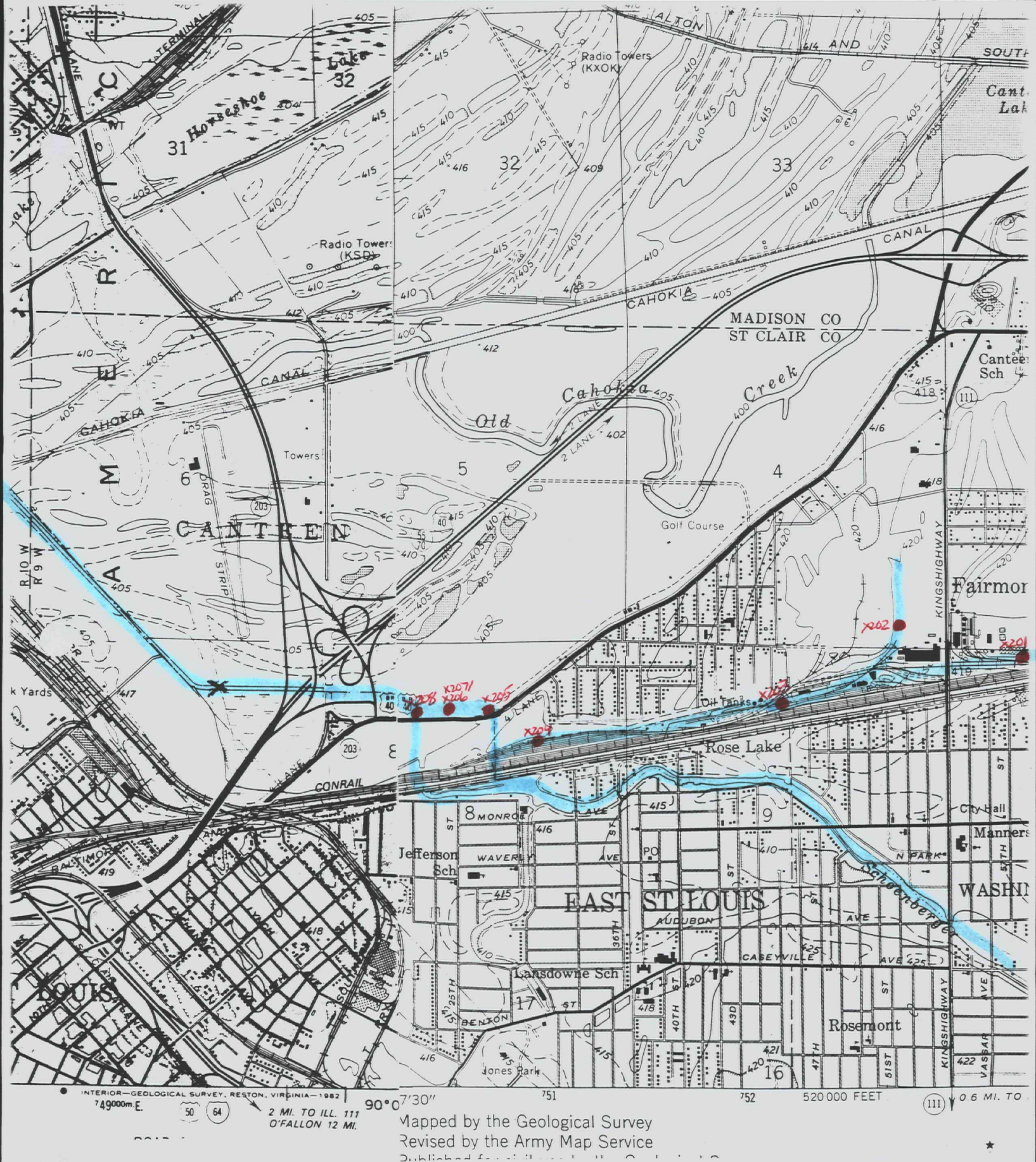
X	Work Plan
X	Safety Plan
X	Sampling Plan
X	Equipment Checklist
X	Log Book
X	Chain of Custody Records
X	Sample Analysis Records
X	Photographs
	Drilling Logs
X	Correspondence
X	Personal Interview Tapes or Transcripts
X	Maps
	Instrument Calibration Records
	Procurement Documents
X	Site Inspection Form (2070-13)
X	HRS Scoring Package
	Other (specify)



On Site & Residential Samples

● - On Site Samples

● - Residential Samples



Sediment Samples

(X201 - X208)